

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A computer program product, tangibly embodied in an information carrier, for developing an application, the computer program product being operable to cause data processing apparatus to:

receive a first model in a first language ~~from a storage device~~, the first model defining development objects representing building blocks for developing the application, relationships among the development objects, and constraints for developing the application;

convert the first model to a second model in a second language, wherein the second model is an XMI model;

generate a set of intermediate objects ~~using~~ by parsing the first second model using an XML parser, ~~wherein the set of intermediate objects comprises Java objects;~~
and

generate an API using the set of intermediate objects as inputs ~~such that the API enforces the relationships and the constraints defined in the first model and enables accessing the development objects~~, wherein the API comprises an interface layer, a proxy layer, a state layer, XML marshalling code, and an XML schema to enforce the constraints.

2. (Cancelled)

3. (Currently Amended) The computer program product of claim [[2]] 1, wherein the second language comprises XML.

4. (Original) The computer program product of claim 1, wherein the first language comprises UML.

5. (Cancelled).

6. (Original) The computer program product of claim 1, wherein the first language comprises a customizable extension.

7. (Previously Presented) The computer program product of claim 6, wherein the customizable extension is used to implement an additional feature of the API.

8. (Previously Presented) The computer program product of claim 7, wherein the additional feature comprises an indication of a file border.

9. (Original) The computer program product of claim 1, wherein the API comprises a copy and paste operation.

10. (Currently Amended) A computer program product, tangibly embodied in an information carrier, for developing an application, the computer program product being operable to cause data processing apparatus to:

receive a first model in a first language ~~from a storage device~~, the first model defining development objects representing building blocks for developing the application, relationships among the development objects, and constraints for developing the application, wherein the first language comprises unified modeling language;

convert the first model to a second model in a second language, wherein the second model is an XML model and the second language comprises XML;

generate a set of intermediate objects by parsing the second model using the ~~first model~~ an XML parser; and

generate a proxy layer, a state layer, XML marshalling code, and an XML schema using the set of intermediate objects as inputs such that the XML schema enforces the relationships and the constraints defined in the first model and enables implementing the development objects.

11. (Cancelled)

12. (Original) The computer program product of claim ~~[[11]]~~ 10, wherein the second language comprises XML.

13. (Cancelled).

14. (Original) The computer program product of claim 10, wherein the set of intermediate objects comprises Java objects.

15. (Previously Presented) The computer program product of claim 10, wherein the XML schema includes a tree based on aggregation relationships in the first model.

16. (Previously Presented) The computer program product of claim 10, wherein the XML schema includes a reference based on an association relationship in the first model.

17. (Previously Presented) The computer program product of claim 10, wherein the XML schema includes a complex type extension based on an inheritance relationship in the first model.

18. (Currently Amended) A computer program product, tangibly embodied in an information carrier, for developing an application, the computer program product being operable to cause data processing apparatus to:

receive a data model defining development objects representing building blocks for developing the application ~~from a storage device~~, relationships among the development objects, and constraints for developing the application, ~~wherein the development objects comprise Java objects;~~

generate an XML model that is a representation of the data model;

generate a set of intermediate objects by parsing the XML model using an XML parser;

derive an API based on the ~~data model~~ set of intermediate objects ~~such that the API enforces the relationships and the constraints defined in the data model, wherein~~

the API comprises an interface layer, a proxy layer, a state layer, XML marshalling code, and an XML schema to enforce the constraints; and

use the API to perform operations on the development objects.

19. (Cancelled)

20. (Previously Presented) The computer program product of claim 18, wherein the operations comprise:

creating a new development object as a transient object without an existing corresponding file; and

modifying the transient object until the transient object is committed to a persistent file.

21. (Previously Presented) The computer program product of claim 20, further comprising instructions to destroy the transient object if a delete command is requested before the transient object is committed to a persistent file.

22. (Previously Presented) The computer program product of claim 20, further comprising instructions to mark the persistent file as deleted if a delete command is requested after the transient object is committed to a persistent file.

23. (Currently Amended) The computer program product of claim 1, wherein the ~~storage-device~~ first model is stored on one of a storage module, a server, and a portable storage device.

24. (Currently Amended) The computer program product of claim 18, wherein the ~~storage-device~~ first model is stored on one of a storage module, a server, and a portable storage device.

25. (New) The computer program product of claim 1, wherein the set of intermediate objects comprises Java objects.

26. (New) The computer program product of claim 18, wherein the set of intermediate objects comprises Java objects.